

CLAIMS

What is claimed is:

1. A visual display comprising:
 - a display installation including:
 - a display panel including a plurality of pixels each having a bit depth; and
 - an interface in communication with the display panel for receiving a video input and for driving the display panel during an active burn mode; and
 - a computer in communication with the display installation for:
 - determining a primary burn value for each of the pixels for the active burn mode;
 - identifying a pixel having a low primary burn value indicating that the identified pixel has been burned at a greater degree than a number of other pixels;
 - and
 - determining a number of pixels each having a primary burn value higher than the low primary burn value indicating that the number of pixels have been burned at a lesser degree than the identified pixel.
2. The visual display of claim 1 wherein the computer causes the interface to drive the display panel during a reverse burn mode such that the number of pixels having a primary burn value higher than the low primary burn value are burned to reduce the respective differences between higher primary burn values and the low primary burn value.
3. The visual display of claim 1 wherein each of the pixels other than the identified pixel has a difference between the primary burn value thereof and the low primary burn value of the identified pixel;
 - the computer causing the display panel to be driven during a reverse burn mode such that each of the pixels other than the identified pixel is burned to reduce the difference.
4. The visual display of claim 1 wherein the computer determines a secondary burn value for each of the pixels such that when a pixel is driven at the secondary burn value thereof

during the reverse burn mode, an average value of the pixel for the active and reverse burn modes is approximately equal to one-half of the bit depth of the pixel.

5. The visual display of claim 4 wherein the computer determines a plurality of secondary burn values for each of the pixels such that when a pixel is driven at the secondary burn values for a corresponding plurality of reverse burn modes, an average value of the pixel for the active and reverse burn modes is approximately equal to one-half of the bit depth.

6. The visual display of claim 4 wherein the interface drives the display panel with the secondary burn values during the reverse burn mode.

7. The visual display of claim 4 wherein the interface drives the display panel such that each of the pixels is driven at a plurality of drive values during the active burn mode; the primary burn value of each pixel being approximately equal to an average value of the drive values of the pixel for the active burn mode.

8. The visual display of claim 7 wherein the secondary burn value of each pixel is approximately equal to the difference between the bit depth and the average value.

9. The visual display of claim 4 wherein each of the pixels has a color set including a plurality of color values each having a bit depth; the computer determining a primary burn value and a secondary burn value for each of the color values of the color set.

10. The visual display of claim 9 wherein:
the plurality of color values includes red, green, and blue, each of which having a bit depth of 256; and
a weighted average of the primary and the secondary burn values for the color set for the active and reverse burn modes is approximately equal to 128-128-128.

11. The visual display of claim 1 wherein the computer monitors an image history of the display panel in determining the primary burn values.

12. The visual display of claim 1 wherein the display installation includes a plasma display panel.
13. The visual display of claim 1 further comprising a plurality of the display installations in communication with the computer.
14. A method for controlling a display panel including a plurality of pixels each having a bit depth, the method comprising:
 - monitoring an image history of the pixels during an active burn mode;
 - determining a primary burn value for each of the pixels during the active burn mode;
 - determining a secondary burn value for each of the pixels such that when a pixel is driven at the secondary burn value thereof for a reverse burn mode, an average value of the pixel during the active and reverse burn modes is approximately equal to one-half of the bit depth of the pixel.
15. The method of claim 14 further comprising:
 - generating a conditioning input based on the secondary burn values; and
 - providing the conditioning input to an interface to drive the display panel.
16. A method for controlling a display panel including a plurality of pixels each having a bit depth, the display panel being driven to display content during an active burn mode, the method comprising:
 - monitoring an image history of the pixels during the active burn mode;
 - determining a primary burn value for each of the pixels for the active burn mode;
 - identifying a pixel having a low primary burn value indicating that the identified pixel has been burned at a greater degree than a number of other pixels; and
 - determining a number of pixels each having a primary burn value higher than the low primary burn value indicating that the number of pixels have been burned at a lesser degree than the identified pixel.
17. The method of claim 16 further comprising causing the display panel to be driven during a reverse burn mode such that the number of pixels having a primary burn value higher

than the low primary burn value are burned to reduce the respective differences between higher primary burn values and the low primary burn value.

18. A method for controlling a display panel including a plurality of pixels each having a bit depth, the method comprising:

monitoring an image history of the pixels during an active burn mode;
identifying a pixel that has been burned at a greater degree than a number of other pixels;
and
determining a number of pixels that have been burned at a lesser degree than the identified pixel.

19. The method of claim 18 further comprising causing the display panel to be driven during a reverse burn mode such that the number of pixels that have been burned at a lesser degree are burned to reduce the burn difference between each of the number of pixels and the identified pixel.

20. A zero-burn user interface for a display panel that is susceptible to burn-in of static and pseudo-static images, the display panel including a plurality of pixels each including red-green-blue color values, the user interface comprising:

a static or pseudo-static area utilizing dynamic color sets having a weighted average of 128-128-128.